

**CLAIMS**

1. A method of growing at least one plant (1) in which a plant is positioned for growth in a first growth substrate (2) which has a first water uptake capacity and a first sinking time S1, and the first growth substrate is in fluid communication with a discrete second substrate (4) which is mineral wool which has a density of 40 to 100kg/m<sup>3</sup> and which has a second water uptake capacity which is less than the first water uptake capacity and a second sinking time S2 and the value of S1 is greater than the value of S2, and during growth the second substrate is flooded with water at intervals.
2. A method according to claim 1 in which the mineral wool has density in the range 50 to 80kg/m<sup>3</sup>, preferably 55 to 65kg/m<sup>3</sup>.
3. A method according to claim 1 or claim 2 in which the fibres of mineral wool have median thickness of 2 to 10 microns, preferably 3 to 8 microns, more preferably 3 to 4 microns.
4. A method according to any preceding claim in which the mineral wool fibres have a substantially horizontal orientation.
5. A method according to any preceding claim in which the mineral wool is bonded with a hydrophilic binder.
6. A method according to any preceding claim in which the at least one plant is grown under conditions of drought stress and/or nutrient stress.
7. A method according to any preceding claim in which the first growth substrate comprises peat, coir, soil, compost, preferably peat.
8. A method according to any preceding claim which is a method of growing at least 10 plants and in which each is in a pot having a base having apertures and the second substrate is a layer of mineral wool which is contained in the pot and forms a barrier between the first growth substrate and the apertures.

9. A method according to any preceding claim which is a method of growing at least 10 plants in which each is grown in a pot containing the first growth substrate in fluid communication with the mineral wool and in which the same  
5 volume of water is taken up by the mineral wool in each pot and the layer of mineral wool in each pot of the same size has the same area and volume.

10. A plant growth environment, such as a filled pot (3), comprising a first growth substrate (2) which has a first  
10 water uptake capacity and a first sinking time  $S_1$ , and the first growth substrate is in fluid communication with a discrete second substrate (4) which is mineral wool which has a density of 40 to 100kg/m<sup>3</sup> and which has a second  
15 water uptake capacity which is less than the first water uptake capacity and a second sinking time  $S_2$  and the value of  $S_1$  is greater than the value of  $S_2$ .